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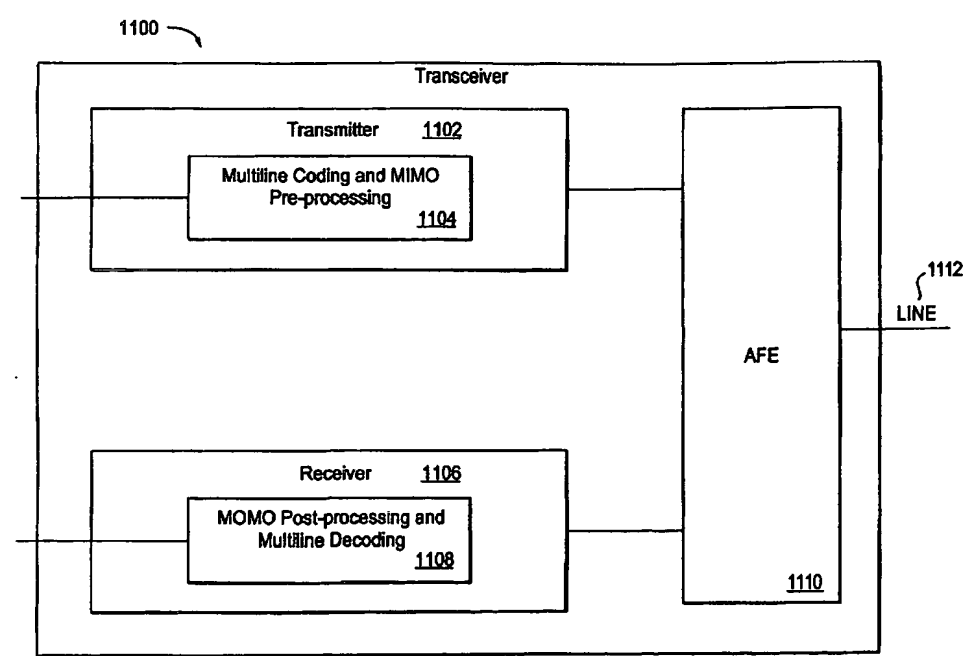
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(54) Title: MULTILINE TRANSMISSION IN COMMUNICATION SYSTEMS



(57) Abstract: A method and system for multiline transmission in communications systems are described. A transmitter (1102) performs MIMO pre-processing (1104) on symbol vectors. A signal vector associated with the symbol vector is transmitted. A receiver (1106) performs MIMO post-processing (1108) on the received signal vectors to minimize the effects of crosstalk on pairs of lines in the multiline communications system.



WO 03/105339 A1

WO 03/105339 A1



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A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : H03H 7/30; H04M 9/00; H04L 5/16 US CL : 375/222, 229; 379/402, 417, 392.01 According to International Patent Classification (IPC) or to both national classification and IPC																				
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 375/222, 229, 230; 379/402, 417, 392.01; 370/281, 286, 276 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched NONE Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) CROSSTALK, DSL, EQUALIZER, MIMO, DMT																				
C. DOCUMENTS CONSIDERED TO BE RELEVANT																				
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																		
X	US 5,181,198 A (LECHLEIDER) 19 January 1993 (19.01.1993), column 6, line 52 - column 8, line 3	1																		
A	US 6,011,814 A (MARTINEZ et al.) 04 January 2000 (04.01.2000), column 2, line 30 - column 4, line 2	1																		
A	US 6,263,077 B1 (ZURANSKI et al.) 17 July 2001 (17.07.2001), column 13, line 18 - column 14, line 55	1																		
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.																				
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